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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,418

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EXAMINER

MACNEILL, ELIZABETH

ART UNIT

PAPER NUMBER

3767

MAIL DATE

DELIVERY MODE

03/18/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,418	<b>Applicant(s)</b> ALEXANDRE ET AL.	
	<b>Examiner</b> ELIZABETH R. MACNEILL	<b>Art Unit</b> 3767	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5 February 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-7, 9, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitney (US 4,150,672) in view of Hitchins (US 6,017,330).

Whitney teaches an injection device with a nozzle (30), a reservoir (11) with collar (16) and connecting means (34). Whitney does not teach at least three bosses connected by connecting branches.

Hitchins teaches an injection device (5) comprising in particular an injection nozzle (20) and a glass tube (50) intended to receive an active substance to be injected, said tube being fixed to said nozzle with the aid of connecting means (28), the connecting means comprising at least three identical bosses (120, 120', 128, 128') which are integral with the nozzle said bosses each comprising an inclined part which is terminated by a flange (Fig 3B), said flange cooperating with a collar (166) which is formed on the tube and is situated at one of the ends of the tube, said collar serving as a anti-return element for the tube when the latter is connected to the nozzle, said device being characterized in that the bosses are connected to one another by connecting branches (formed by 112).

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Regarding claim 2, the inclined part of the bosses is inclined in the direction of the nozzle and toward the inside of the nozzle (Fig 3B).

Regarding claim 3, each boss is inwardly curved, the bosses being inscribed in a same circle whose diameter is substantially equal to the external diameter of the collar of the tube (Fig 3B)

Regarding claim 5, the bosses are spaced apart from one another at regular intervals (Fig 3B).

Regarding claim 6, the nozzle has a flat surface (140), the bosses being situated at a non-zero distance from said surface the space between the flange of the bosses and said surface substantially corresponding to the thickness of the collar of the tube. (Fig 3B)

Regarding claim 7, the end of each of the bosses has a rounded shape. (Fig 3B)

Regarding claim 9, each boss is supported by a rod (the base of the boss) which is fixed to the nozzle and is able to deform elastically.

Regarding claim 11, the bosses are supported by the connecting branches (112), said connecting branches being made integral with the nozzle by means of connecting blocks and being connected to one another so as to define a substantially circular crown whose diameter is substantially equal to the external diameter of the collar of the tube (Fig 3B)

Regarding claim 12, the nozzle, the bosses, the connecting branches and the connecting blocks are made as one piece (Fig 3B)

Regarding claim 13, the nozzle is made of polycarbonate (Col 12 line 11)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the connecting means of Hitchens instead of the threads of Whitney since both serve the same purpose and could be interchanged with one another without altering the function of the device. It has been held that substituting one element for another element which serves the same purpose is within the skill of an ordinary worker in the art.

3. Claims 4, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitchins and Whitney as applied above.

Regarding claims 4, 8 and 10, Hitchins does not teach the specific dimensions the applicant is reciting. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to use the applicant's dimensions since applicant has not disclosed that his dimensions provide an advantage, are used for a particular purpose, or solve a stated problem. Rather, the applicant notes that certain relationships exist for the dimensions (i.e. "the greater the diameter of the circle, the more stable is the connection of the tube to the nozzle and the weaker the forces exerted on the glass tube."), but does not state why the exact dimension is needed. One of ordinary skill in the art, furthermore, would have expected Hitchins coupler, and applicant's invention, to perform equally well with any reasonable dimensions and would perform the same function of securing a glass cartridge to an injector. Therefore, it would have been prima facie obvious to modify Hitchins to obtain

the invention as specified in claim 1 because such a modification would have been considered a mere design consideration which fails to patentably distinguish over the prior art of Hitchins. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed dimensions, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 61 F.2d 373, 205 USPQ 215 (CCPA 1980).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-13 have been considered but are not persuasive. Applicant argues that the combination does not teach a flange which cooperates with a collar on the reservoir. See Whitney Fig 3 and 6. The threads of Whitney's nozzle (thread 34, nozzle 30) cooperate with the collar (16) by securing the nozzle and preventing the collar/reservoir from being pushed forward by the plunger of the pump (Fig 3). Without the threads, the reservoir would be pushed out of the pump. The term "cooperating" does not require any specific mechanical engagement.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). As stated above, the use of removable connecting means is a well known concept, as taught by Whitney for attaching a nozzle and a reservoir to a pump device. Hitchins teaches alternate connecting means meeting the claimed structure of the applicant. One of ordinary skill in the art would recognize these connecting means as

interchangeable and would have a reasonable expectation of success when using the connecting means of Hitchins.

### ***Conclusion***

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH R. MACNEILL whose telephone number is (571)272-9970. The examiner can normally be reached on 9:00-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Simons can be reached on (571) 272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elizabeth R MacNeill/  
Examiner, Art Unit 3767  
/Kevin C. Sirmons/  
Supervisory Patent Examiner, Art Unit 3767